

AMENDMENTS TO THE SPECIFICATION

Please replace Paragraphs [0052]-[0054] with the following paragraph rewritten in amendment format:

[0052] Using the optical disc thickness measuring apparatus as described above, raw data for determining the thickness of the optical disc such as an HD-DVD may be measured by detecting an obtained. Detected variations, according to changes in wave length, of the intensity of a reflective light according to the wavelength of the light are treated as a first spectrum of data for each wavelength (Step S10). An example of The detected first spectrum data is are illustrated in FIG. 5A.

[0053] The detected first spectrum data for each wavelength is then converted into spectrum data for each wavelength into a second spectrum of values value that is a function not only of a wavelength reflective but also of the refractive index (Step S20).

[0054] An equation for processing the converting the first spectrum into the second spectrum may be expressed by the following Equation 3.

Please replace Paragraph [0067] with the following paragraph rewritten in amendment format:

[0067] By using the function relationship with respect to $\Delta(n(\lambda)/\lambda)$ of the intensity of the light obtained according to the equation as described above, the apparatus can obtain the second spectrum which is a function of data where the refractive index is reflected into the and separately also is a function of wavelength. In this regard, FIG. 5B illustrates an example of a graph setting that plots the intensity of reflective light as a vertical axis and a value $n(\lambda)/2\lambda$ in which a refractive index is reflected by a function of a wavelength as a horizontal axis. In other words, in the plot of Fig. 5B, intensity varies according to a first factor that is the index of refraction n and a separate second factor that is \lambda. It is noted that the index of refraction is a function of λ , namely $n(\lambda)$.